TRAFFIC CONTROL

AGRICULTURAL RESPONSE MONOGRAPH No. 001

NEBRASKA DEPARTMENT OF AGRICULTURE AGRICULTURAL EMERGENCY RESPONSE ACTIONS LIVESTOCK DISEASE EMERGENCY



INITIAL ISSUE

August 1, 2005

Initial Issue Initial Issue Date August 1, 2005

TABLE OF CONTENTS

2.0	SUMMARY OF PROCEDURES	1
2.1 2.2 2.2.1	Locating Traffic-Control Points	2
2.2.2	Equipment 3	
2.2.3	Methodology	4
2.3 2.3.1	Access Corridors Personnel	
2.3.2	2.3.1.1 Traffic Control and Restricting Access Personnel	
2.3.3	Methodology	8
2.4 2.5 2.6 2.6.1	Health and Safety Communication Documentation Access Screening	9 . 10
2.6.2	Resources Used	. 12
2.7	Training	. 12
2.8	Public Information	

1.0 SCOPE AND APPLICATION

The purpose of this monograph is to provide functional guidance about the establishment, operation and maintenance of traffic-control points associated with a contagious animal disease (CAD) outbreak and the resulting livestock or poultry quarantine. Local emergency management should use this monograph as a template or reference to develop an operational plan for providing traffic-control during a CAD. Operational plans must be consistent with the Local Emergency Operations Plan (LEOP). Several sections of this monograph contain general descriptions of the scope of operations necessary to implement a particular component of traffic control. In most cases, these sections were made general to encourage more detailed, county-specific operational planning. Examples of these sections include Health and Safety, Communication, and Public Information.

2.0 SUMMARY OF PROCEDURES

This monograph presents the operational considerations and details associated with controlling traffic in the event of a CAD outbreak which results in the need to establish quarantine zones. Under a quarantine situation, two types of traffic control must be provided: stopping traffic (no-access) and controlled access (access corridors). While both forms of traffic control share common components, they are addressed separately under this monograph. Decontamination and disinfection are critical components of establishing access corridors, and they are addressed in Monograph No. 004 *Decontamination and Disinfection*.

2.1 Locating Traffic-Control Points

The location of traffic-control points will be determined by the Unified Command (UC), which will include state or federal veterinarians. In large responses, these veterinarians may be part of the Command Staff of an Area Command.



The quarantine boundaries will be based on geographical, epidemiological, social, and economic criteria. The UC is responsible for locating access corridors and no-access points associated with the requested quarantine zone. The UC should include or, at least, coordinate with county roads and Nebraska Department of Roads personnel when locating access-control points. Expansion or contraction of quarantine boundaries will be determined by the UC. It will be the lead veterinarian's responsibility to communicate the need for boundary shifts to the UC. When boundaries are changed, the UC will communicate these changes to the Operations and Planning staff. Operations staff will communicate the changes to personnel staffing the traffic-control points and direct their resulting actions.

If possible, the location of access corridors should be based on prevailing winds in the quarantine area. The access corridor should be situated upwind from the infected area.

2.2 Stopping Traffic

The following information identifies personnel, equipment, and other supporting services that should be provided to establish, operate, and maintain no-access traffic-control points.

2.2.1 Personnel

No-access traffic-control points should be staffed by at least two people. Generally, it is best to have at least one law enforcement officer associated with a traffic-control point. If this is not possible due to limited resources, available law enforcement officers should be assigned groups of traffic-control points that they can monitor and respond quickly to if requests for assistance are made. Possible law enforcement officials who could be utilized to support no-access traffic-control points include: Nebraska State Patrol Troopers, local sheriff's staff, local police, Nebraska Game and Parks officers, and military police from the Nebraska National Guard. State resources may not become accessible to the UC until the Governor declares a state of emergency and the UC processes a support request through the Nebraska Department of Agriculture (NDA),



the coordinating State agency for an agricultural emergency as defined under the State Emergency Operations Plan (SEOP).

Non-law enforcement federal, state, county, or city personnel should be used in a supporting role to man no-access traffic-control points. Possible organizations that could be used for support include: fire department, county roads, public works department, Nebraska Department of Roads, the Nebraska National Guard, and the Nebraska Game and Parks Commission. Counties also can access citizen corps or other volunteer organizations as appropriate. If these groups are utilized, the county attorney should evaluate volunteers' liability relative to assisting the county in the response to a livestock or poultry emergency. Every effort should be made to limit or remove associated liabilities for volunteers.

Personnel will be assigned to these traffic-control points. Shifts of time will be determined by the Planning Staff. In most cases, these workers will need to be provided food, water, and sanitary facilities.

2.2.2 Equipment

The following list of equipment should be provided for each no-access traffic-control point:

- Barricades (plastic, concrete, metal, hay bales, etc.): Any material can be used to create barriers to stop the flow of traffic. If a county needs to establish unmanned no-access points due to limited personnel resources, barricades must be of sufficient size and design to prevent the movement of traffic along the chosen road. While the possibility exists that travelers may try to bypass an unmanned no-access point, the use of signage and temporary fencing may help prevent this practice.
- Signage: Depending on the local and regional demographics, it may be necessary to provide signage in several languages, in addition to English. The following bullets present examples of the general types of signage needed.
 - o Identifying the traffic-control point.
 - o Identifying alternate detours.
 - o Explaining why the traffic-control point has been established.



- Reflective vests.
- Shelter: Shelter for the personnel staffing at the no-access points, depending on the season, should provide protection against temperature extremes, winds, and precipitation.
- Lighting: Lighting should be established to mark the no-access point and provide general area illumination for staff working at the no-access point. Flashers attached to barriers or signs can be used to alert approaching travelers of the impending traffic-control point. With any lighting system, it will be necessary to provide electricity, either with batteries, generators, or drop service from power lines. The use of a drop service will require coordination with the local power company.
- Communication: Each access-control point should be provided a means of communication with the emergency operation center (EOC). Generally, this will consist of portable radios tied into the EOC's frequency. Selection of radios should consider local topographic and cultural interferences that could negatively impact transmission and reception. If line-of-sight or distance becomes a limiting factor, the use of portable antennas or repeater towers may be necessary. In some cases, pagers, cellular phones, citizen band radios, or other devices will be appropriate. Whichever system is chosen, it must be compatible with other systems used in the UC, and must have the bandwidth or capacity to function effectively during an emergency.
- Portable sanitary facilities: Since it is likely these services will be needed over an extended time, a cleaning and pumping schedule will need to be established.
- Maps: It may be necessary to provide travelers, rerouted at a no-access point, a physical
 map to help them navigate a detour. These maps can be as simple as a general county
 map with the detour highlighted.

2.2.3 Methodology

The specific methodology that applies to the above-mentioned personnel and equipment to prevent road access into a quarantine area will be dependent on the specific resources available to Operations and Logistics, and the number of no-access points involved. Operations and Planning may implement a combination of staffed and unstaffed no-access points. Whatever the specific method(s) planned, the method(s) must reasonably ensure that vehicular traffic across the access-control point does not occur, either into or out of the quarantine area. Many law enforcement organizations have pre-existing standard operating procedures or guidance for



stopping and rerouting traffic. These procedures would be directly applicable to county planning for traffic control.

2.3 Access Corridors

Access corridors will utilize many of the same resources associated with a no-access point. Access corridors will have additional requirements associated with providing decontamination and disinfection (personnel, pets, vehicles, and other possessions) and documenting and regulating access. Specific considerations of decontamination and disinfection are addressed in Monograph No. 004 *Decontamination and Disinfection*. The following information identifies the personnel, equipment, and other supporting services that should be provided to establish, operate, and maintain access corridors for the controlled movement of people, animals, and vehicles into and out of a quarantine zone. This information will be critical to both the Planning and Operations staff supporting the Incident Command or Unified Command.

According to <u>Neb</u>. <u>Rev</u>. <u>Stat</u>. §54-701, General Powers Statutes, NDA has the power to quarantine and euthanize animals. While not specifically stated, NDA legal staff believes that inherent in this power is the authority to restrict the movement of humans to prevent the spread of a livestock or poultry disease. This is directly applicable to an access corridor, and gives local responders the authority to require people and vehicles, departing a quarantine zone, to decontaminate and disinfect themselves, pets, or possessions prior to being allowed to pass through an access corridor.

2.3.1 Personnel

Access corridors will require two groups of staff. One group will control traffic and restrict access. The second group will provide inspection and disinfection services to people, vehicles, pets, and other possessions leaving the quarantine zone. Both groups should consist of at least two people. Operations will assign personnel to the various tasks associated with an access corridor. Personnel will be assigned to these traffic-control points for shifts whose length will be



determined by Planning and Operations. Generally, these workers will need to be provided food, water, and sanitary facilities.

2.3.1.1 Traffic Control and Restricting Access Personnel

At least one law enforcement officer should be staffing this portion of an access corridor. Possible law enforcement officials who could be accessed to support access corridors include: Nebraska State Patrol Troopers, local sheriff's staff, local police, Nebraska Game and Parks Officers, and military police from the Nebraska National Guard. State resources may not become accessible to Operations until the Governor declares a state of emergency and the UC, Operations and Logistics processes a support request through NDA.

Non-law enforcement federal, state, county, or city personnel should be used to support the traffic-control portion of an access corridor. Possible organizations that could be used for support include: fire department, county roads, public works department, Nebraska Department of Roads, and the Nebraska National Guard. Counties also can access citizen corps or other volunteer organizations as appropriate. If these groups are utilized, the county attorney should evaluate volunteers' liability relative to assisting the county in the response to a livestock or poultry emergency. Every effort should be made to limit or remove associated liabilities for volunteers.

2.3.1.2 Decontamination and Disinfection Personnel

It is not necessary to utilize law enforcement personnel at a decontamination and disinfection station at an access corridor. Generally, staff working here will require training in the following areas: operation and maintenance of a disinfection or decontamination station, biosecurity, and foreign animal disease (FAD). Training in the latter two areas can be provided by local veterinary staff. The training will allow these personnel to make informed decisions regarding the need for, and adequacy of, disinfection; as well as the background to identify possible disease



spread vectors inside vehicles of otherwise associated with the travelers. See relevant sections of Monograph No. 004 *Decontamination and Disinfection* for details.

Often, local fire and rescue personnel have had training in decontamination and disinfection. In some cases, these groups will have pre-established procedures for the setup and operation of personal and vehicle decontamination stations relative to a hazardous waste incident. These procedures will be directly applicable to the decontamination and disinfection needed at an access-control point set up for a CAD response. If these groups have appropriate procedures, they can be modified as necessary or merged into the ideas presented in this monograph and Monograph 004. Other personnel may be obtained from the following organizations: county roads, public works department, Nebraska Department of Roads, the Nebraska National Guard, local citizen's corps, or other organizations with appropriately trained personnel.

2.3.2 Equipment

The equipment needed to create and support an access-control point is the same as that needed to stop traffic. The exception is associated with the decontamination and disinfection activities conducted at access-control points. The process of decontamination and disinfection is addressed separately in Monograph No. 004 *Decontamination and Disinfection*. The following list identifies equipment that could be used at an access corridor.

- Barricades (plastic, concrete, metal, hay bales, etc.): Any material can be used to create
 barriers to stop the flow of traffic. If a county needs to establish unmanned no-access
 points due to limited personnel resources, barricades must be of sufficient size and design
 to prevent the movement of traffic along the chosen road. While the possibility exists
 that travelers may try to bypass an unmanned no-access point, the use of signage and
 temporary fencing may help prevent this practice.
- Signage: Depending on the local and regional demographics, it may be necessary to provide signage in several languages, in addition to English. The following bullets present examples of the general types of signage needed.



- o Identifying the traffic-control point.
- o Identifying alternate detours.
- o Explaining why the traffic-control point has been established.
- Reflective vests.
- Shelter: Shelter for the personnel staffing at the no-access points, depending on the season, should provide protection against extremes of temperature, winds, and precipitation.
- Lighting: Lighting should be established to mark the no-access point and provide general
 area illumination for staff working at the no-access point. Flashers attached to barriers or
 signs can be used to alert approaching travelers of the impending traffic-control point.
 With any lighting system, it will be necessary to provide electricity, either with batteries,
 generators, or drop service from power lines. The use of a drop service will require
 coordination with the local power company.
- Communication: Each access-control point should be provided a means of communication with the EOC. Generally, this will consist of portable radios tied into the EOC's frequency. Selection of radios should consider local topographic and cultural interferences that could negatively impact transmission and reception. If line-of-sight or distance becomes a limiting factor, the use of portable antennas or repeater towers may be necessary. In some cases, pagers, cellular phones, citizen band radios, or other devices will be appropriate. Whichever system is chosen, it must be compatible with other systems used in the UC as well as having the bandwidth or capacity to function effectively during an emergency.
- Portable sanitary facilities: Since it is likely these services will be needed over an extended time, a cleaning and pumping schedule will need to be established.
- Maps: It may be necessary to provide travelers, rerouted at a no-access point, a physical
 map to help them navigate a detour. These maps can be as simple as a general county
 map with the detour highlighted.

2.3.3 Methodology

The specific methodology used to control access into and out of a quarantine area will be dependent on the specific resources available to the UC, Operations and Logistics, as well as, the number of access points involved. Whatever the specific method(s) planned, the method(s) must reasonably ensure that vehicular traffic across the access-control point is controlled, and



decontamination and disinfection protocols are maintained, either into or out of the quarantine area.

2.4 Health and Safety

General first aid and access to emergency medical services must be provided at all traffic-control locations that are staffed. This portion of a response would be coordinated by the Safety Officer, a member of the Command Staff supporting the UC.

Decontamination and disinfection area personnel should be provided personal protective equipment (PPE) to minimize their exposure to contaminated materials. Unless stipulated by the lead responding veterinarian (possibly a position added to the Command Staff), respiratory protection is probably not necessary. Decontamination and disinfection workers should wear waterproof clothing or rain suits, with hoods that can be disinfected and reused. Rubber gloves and rubber boots also will be needed. These items can be disinfected and reused. Under gloves, cotton or nitrile, should be worn under the outer rubber glove. The personnel also should wear hardhats fitted with face shields to protect their faces. In addition, dust masks can also be worn to protect the workers mouths and to prevent ingesting splashed materials. See Monograph No. 004 Decontamination and Disinfection.

2.5 Communication

Due to the dynamic nature of an emergency response to a CAD, the establishment, maintenance and relocation of traffic-control points must be coordinated with the ever-changing understanding of the nature and extent of the disease in question. In order to allow the traffic-control points to quickly respond to changing field conditions, communication between the traffic-control point personnel and the EOC must be maintained. Real-time communication and preshift meetings constitute the required communication needed to support traffic-control points.



2.6 Documentation

Documentation is critical to providing an accurate record of creating, operating, and maintaining traffic-control points. This information is important in managing an emergency response, managing disease containment, providing liability protection, and in cost recovery efforts.

Documentation should focus on two areas: access screening and recording the resources used. These two considerations are addressed separately below.

Due to the nature of an emergency response, it is critical to identify personnel who will be responsible for documenting these issues or monitoring and verifying that the needed documentation is being collected by other parties. In some cases, identifying a specific response job that includes documentation will be preferable, especially if personnel will be rotated through shifts and response jobs. This role and responsibility should be identified and described in a county's LEOP.

Documentation should be maintained in written form. Video, photographs, and tape-recorded messages can be used to supplement the written documentation. Written documentation can be maintained in a logbook format, using documentation worksheets, or a combination of both. Documentation should be recorded with an ink pen, and any entry errors should have a single line drawn through them with the author's initials and date recorded at one end of the line. If a logbook is used, it should have numbered pages and the spine should be sewn, making the removal of pages both difficult and obvious. Pages should never be removed from a logbook. Anyone making entries in the logbook should sign and date the bottom of each page. If documentation worksheets are used, the author should sign and date the bottom of each worksheet. Sets of logbooks and worksheets should be assigned to each response task (e.g., traffic-control, decontamination/disinfection, mortality disposal, etc.) or a master set of logbooks and sheets can be maintained. Logbooks and worksheets should be assigned unique identification numbers. When the logbooks or a group of worksheets is issued from Planning (response related) or Finance/Administration (cost and time reporting related) to a responder, the identification numbers of the logbooks and worksheets should be recorded and the recipient



should sign them out in a document tracking log maintained by the issuing Section. This establishes a chain-of-custody for the documentation.

If pictures, video, or taped messages or interviews are used to supplement the written documentation record, the following information should be documented for each picture, video segment, or audio taped message or interview: photographer or interviewer, subject, time, date, person interviewed (video or audio taped), photo, and film roll number, direction (pictures and video) and general weather conditions (e.g., temperature, wind direction, humidity, sky condition, etc.).

2.6.1 Access Screening

Quarantine zone ingress and egress control is a crucial part of disease containment and response management. This control directly affects disease containment, and it provides security for residents living within the quarantine areas. Only responders and residents should be allowed to enter the quarantine zone. In either case, personnel staffing the access corridor should be provided lists of responders and residents cleared for access. The compilation of this list will be the responsibility of the Planning Section. A state or federally issued form of identification should be required to verify the identification of anyone desiring entry into the quarantine zone. After the initial identity verification, the issuance of a temporary access card, or other traceable indicator of approved access, could be issued to responders and residents to speed up flow through the access corridor. Depending on the security level required, examples of these indicators can range from simple color-coded dashboard cards to computer scanned bar-coded access cards.

As responders and residents exit or enter a quarantine zone, their identities must be verified, and their names, time of entry, and exit should be documented. If there are unusual circumstances associated with an entry or access, this should be documented as well.



2.6.2 Resources Used

Throughout the process of providing traffic-control associated with a CAD, it will be necessary to provide various types of documentation. For indemnity payments to the responding agency or other forms of state or federal reimbursement or cost sharing, it will be necessary to document the resources applied and expended in providing traffic control. These costs can include labor charges, equipment rentals or purchase, costs of expendable equipment or supplies, subcontractor costs, or any other costs associated with providing the traffic-control services. Possible actions or items that should be included in a documentation checklist include:

Responder time (hours)
Number of responders
Identity of responders
Mileage to the traffic-control point
Sanitation services provided

Meals provided
Location of each responder
Equipment at each point
Usage time for equipment
Specific quantities of expendables used

Documentation also will be essential to tracking vehicles, animals, and people who exit and enter the quarantine area.

2.7 Training

Personnel training will be a critical component of planning to initiate traffic-control measures in the event of a quarantine situation. Public concern and potential conflict associated with traffic control will require training to comfort and defuse potentially volatile citizens. Law enforcement personnel have this training and can be a training resource for non-law enforcement personnel who would support the traffic-control portion of a no-access or access corridor traffic-control point.

Personnel staffing the decontamination and disinfection station will require training in: FADs, biosecurity, the operation and maintenance of the decontamination and disinfection equipment, disinfection procedures, associated environmental protection issues; and the inspection of people, vehicles, pets, and other possessions at quarantine zone access points. The quarantine



access-control training will require basic training in biosecurity and FAD. Some of these requirements are addressed in NDA Monograph No. 003 *Temporary Housing of Livestock and Poultry*, Section 2.3. Local veterinarians and Cooperative Extension should be utilized to develop and provide this training for responders that may be assigned these tasks.

Personnel associated with the movement of vehicles through an access corridor will need to be familiar with the documentation requirements and the access screening protocols developed by the county. Access screening will allow only authorized people to enter a quarantine zone.

Training in FAD and biosecurity can be provided at a local level by private, state, or federal veterinarians. Training relative to decontamination and disinfection can be provided by local fire or emergency medical services personnel. In some counties, military Reserve or National Guard units, and local health departments can assist in providing decontamination and disinfection training.

2.8 Public Information

Once the quarantine is issued, the Public Information Officer (PIO), attached to the Command Staff will initiate the county's public information and media plan to inform the local community of the existence and location of traffic-control points, and the associated alternate routes. County roads and the Nebraska Department of Roads personnel should be consulted when alternative routes are created. In addition, it will be necessary to notify the public of the possibility of delays at access corridors and what procedures will be used as quarantine areas are exited. This notification may involve public announcements via radio, television, web site, newspaper, signage announcing the traffic-control points, or any other appropriate mechanisms to inform the public of the areas involved with the traffic control. Any information release should be coordinated with state or federal PIOs attached to Area Commands. Local responders should identify and make use of any state or federal pre-prepared information or press releases that could be used in responding to a CAD. Public notification can help citizens plan alternate routes



Nebraska Department of Agriculture Agricultural Emergency Response Actions – Livestock Disease Emergency Title: Traffic Control Initial Issue Date August 1, 2005

around quarantine areas or help them understand possible travel delays associated with the traffic-control activities.

In general, response workers should be trained to refer any press or other project-specific inquiries to the PIO.

Initial materials for this Monograph were furnished by SES, Inc., as part of work performed for the Nebraska Department of Agriculture under a grant from the Nebraska Emergency Management Agency.

